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**Selfie-Objectification: Self-Objectification and Positive Feedback (“Likes”) are
Associated with Frequency of Posting Objectifying Self-Images on Social Media**

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Abstract

The present study is the first to examine the extent to which young adult women post objectifying self-images on social media, and whether the frequency of posting such content can be predicted by self-objectification and positive feedback (likes). Eighty-six young adult women from the UK (Age $M = 19.88$; $SD = 1.34$, $Range = 18-24$) completed self-report measures of self-objectification and social media use. The 20 most recent images they had posted on their personal Instagram accounts were downloaded (Image $N = 1720$) and content analysed for self-objectifying content. The analysis found that 29.77% of participants' Instagram images were objectified, though there were individual differences. Higher frequency of posting objectified self-images was associated with trait self-objectification and receiving more likes on this type of self-image, relative to non-objectified self-images. The implications of the novel findings for objectification theory are discussed within.

Introduction

In Western consumer culture, women are routinely objectified, that is, their value is reduced to the appearance of their body parts and/or their sexual function (Calogero, Tantleff-Dunn, & Thompson, 2011; Fredrickson & Roberts, 1997). However, little is known about how young adult women, socialised in this culture to self-objectify and adopt an external viewer's perspective of their own body, present themselves to others (Fredrickson & Roberts, 1997; Moradi & Huang, 2008). Social media (i.e., web and mobile based applications used to communicate with others through user-generated content) provide a novel opportunity for understanding how women who self-objectify present themselves to others and how objectified self-presentations are received (Kapidzic, 2015). Self-presentation through images are particularly popular: Instagram, the most popular image-focused social media platform, reports 300 million daily users (Instagram, 2016). Through Instagram, users can create and share self-images for immediate feedback (e.g., likes and comments) from others (Chua & Chang, 2016). The present study aims to examine the extent to which women present themselves in self-objectifying ways on social media, and whether frequency of posting self-objectifying images are associated with trait levels of self-objectification and typically receiving more positive audience feedback in comparison to other types of self-images.

Objectification Theory and Self-Objectification

Objectification theory provides a useful framework for understanding the psychological and behavioural consequences of growing up in a culture that routinely objectifies the female body (Fredrickson & Roberts, 1997; Moradi & Huang, 2008). Objectification occurs when a person is deprived of their personhood to the extent that they are perceived as or behave in an object-like way relative to a human (Haslam, 2006; Heflick & Goldenberg, 2014). Sexual objectification, a specific form of objectification, occurs when

individuals are reduced to, and valued for, their body parts or sexual function over their internal attributes and human worth (Calogero et al., 2011; Fredrickson & Roberts, 1997).

According to objectification theory, girls and young women who are repeatedly exposed to sexually objectifying cultural messages are socialised into adopting an external viewer's perspective of their own bodies and perceive themselves as objects—known as self-objectification (Calogero et al., 2011; Fredrickson & Roberts, 1997). In turn, this tendency to habitually self-objectify (i.e., trait self-objectification) has been linked to a variety of deleterious psychological and behavioural consequences including low self-esteem and life satisfaction (Mercurio & Landry, 2008), negative body image (Calogero & Thompson, 2009; Steer & Tiggemann, 2008) and disordered eating behaviour (Noll & Fredrickson, 1998; Tiggemann & Williams, 2012). Furthermore, objectification can also be temporally activated (i.e., state self-objectification) by a contextual factor, leading to more object-like behaviour in the short-term, such as talking less and reduced cognitive performance (Gay & Castano, 2010; Saguy, Quinn, Dovidio, & Pratto, 2010).

Media, Social Media and Self-objectification

The mass media play an important role in the objectification of women (Aubrey & Frisby, 2011; Fredrickson & Roberts, 1997). Content analyses of media imagery consistently show that women are depicted in ways that over-emphasise and over-value their body parts and sexual function: this is achieved by depicting women, relative to men, as body parts dismembered from the body, with their faces omitted, wearing revealing clothes, exposing more flesh/body parts, or adopting seductive, sexy, and suggestive poses (e.g., Aubrey & Frisby, 2011; Coltrane & Messineo, 2000). Recent content analyses demonstrate that a high proportion of women featured in social media imagery are similarly objectified (Carrotte,

Prichard, & Lim, 2017; Deighton-Smith & Bell, 2017; Ghaznavi & Taylor, 2015; Tiggemann & Zaccardo, 2016).

In contrast to traditional media, images found on social media are user-generated. Many of these images are self-images (or “*selfies*”), created by social media users as a form of self-presentation: a way of showing who they are to others (Chua & Chang, 2016; Manago, Graham, Greenfield, & Salimkhan, 2008; Mascheroni, Vincent, & Jimenez, 2015). Thus, many of the objectified images found on social media are likely to be self-presentations, posted by the users themselves. The extent to which young women present themselves in objectified ways on social media remains unclear, largely because content analyses have typically focused on images labelled with specific hashtags (i.e., metadata labels that add images to an online searchable repository of other images with that label), such as #fitspiration, #selfie, or #thinspiration (Deighton-Smith & Bell, 2017; Doring, Reif, & Poeschl, 2016; Ghaznavi & Taylor, 2015; Tiggemann & Zaccardo, 2016). Furthermore, many of the images found with these hashtags are commercially produced. A small number of studies have specifically focused on identifying objectified self-presentations (Hall, West, & McIntyre, 2012; Kapidzic & Herring, 2015), but these studies have focused on publicly searchable profile pictures only, thus missing private and non-profile self-images.

Engaging in objectified self-presentations may have unintended negative interpersonal consequences. Laboratory studies have found that when young women are presented in a sexualised way (e.g., wearing a bikini) as opposed to a non-sexualised way (e.g., wearing jeans and t-shirt), men perceive them as being less agentic and less competent (Cikara, Eberhardt, & Fiske, 2011). Daniels and Zurbriggen (2016) replicated these findings in a social media environment and found female participants rated the same female Facebook user as less socially and physically attractive and less competent when she was depicted wearing a

low-cut dress and a visible garter belt (i.e., objectified), compared to when depicted wearing a t-shirt, jeans, and a scarf covering her chest (i.e., non-objectified). Therefore, not only is it important to understand the extent to which young women present themselves in objectifying ways on social media, but it is also important to identify factors associated with these self-presentations.

Self-Objectification, Self-Presentations, and Audience Reactions

Self-objectification may be one factor associated with posting sexually objectified self-presentations on social media. Current research has demonstrated links between an increased likelihood of engaging in sexualised self-presentations on social media and factors typically associated with self-objectification. Vandenberg, van Oosten, and Peter (2015) found that engagement with sexually-objectifying media (e.g., sexual reality TV like MTV's *Geordie Shore*) predicted online sexualised self-presentation among young men and women. Research has also found that the endorsement of gender stereotypes predicts male and female adolescents' sexy self-presentations and exposure to sexy self-presentations of others (van Oosten, Vandenberg, & Peter, 2017). While these studies demonstrate links between self-objectification-related factors and sexualised online self-presentations, little research has shown how young women who habitually self-objectify present themselves visually to others.

Self-presentation theory (SPT) is typically used to explain the factors motivating online self-presentations (Chua & Chang, 2016; Mascheroni et al., 2015). SPT argues that individuals are motivated to engage in self-presentation by desires to convey their ideal self and to please their audience (Baumeister, 1982). For young women who self-objectify, portraying the self in objectified ways on social media is likely to fulfil both motives. Alternatively, research has also shown that using sexualised avatars in online environments can increase state self-objectification in young women (Fox, Ralston, Cooper, & Jones, 2015;

Vandenbosch, Driesmans, Trekels, & Eggermont, 2017). Thus, self-objectification may be a consequence as well as a cause of posting objectified self-presentations on social media.

A further factor that may be associated with presenting the self in objectified ways on social media is the audience response to them. The *like* feature of some forms of social media (e.g., Instagram and Facebook), wherein users effortlessly provide positive feedback on the content of others at the click of a button, is of interest here since it offers easily quantifiable and ostensibly unambiguous measure of positive audience feedback (Sherman et al., 2016). Social reward is a potent motivator of behaviour among young people (Foulkes & Blakemore, 2016). Therefore, receiving more likes on objectified self-images, relative to non-objectified self-images, may serve as positive reinforcement for an objectified self-image, increasing their posting frequency. Such a prediction would also be consistent with SPT, since receiving more likes on a specific self-presentation would be indicative of having pleased the audience, thus motivating future similar self-presentations.

The Present Study

The aims of the present study are twofold. First, the present study aims to use content analysis to examine the extent to which young adult women engage in self-objectification in the images they share on their personal social media profiles (RQ₁). Second, the present study aims to examine the individual and social factors that may contribute to the frequency of posting self-objectifying images. It is hypothesised that young women who report high levels of trait self-objectification will present themselves in objectified ways more frequently on social media (H₁). It is also hypothesised that receiving more positive feedback on images (i.e., more likes) will predict the frequency with which girls present themselves in self-objectified ways on social media (H₂).

Method

Participants

A convenience sample of 86 young adult women (*Age* $M = 19.88$; $SD = 1.34$, *Range* = 18-24) were recruited via adverts placed on social media and on a university campus. Participants were Caucasian ($N = 86$) undergraduate students at a UK university. All participants had an Instagram account: approximately half of the sample had a private Instagram account (48.8%; $n = 42$) and half had a public account (51.2%; $n = 44$). Each participant provided the researchers with access to their 20 most recent Instagram posts, resulting in an overall sample of 1720 Instagram images for the content analysis.

Coding of Instagram Posts

A coding book was created by the first and second authors detailing how to code for self-images, objectified self-images and audience reaction to images. Coding was initially performed by the second author, and then a 75% subsample was coded by the third author. Cohen's kappa showed high inter-rater reliability between the two coders ($K = .81-.96$; See Table 1). The frequency of each coding category within the sample is shown in Table 1.

Self-images. Images were coded as to whether the participant was present in the image or not (1 = Present, 0 = Absent). To do this, the researcher checked the image against the profile picture for the account and also utilised any clues within the set of images that could assist with this judgement (e.g., images labelled as "selfie").

Objectified self-images. Images were coded across four different facets of objectification derived from existing content analyses of mainstream and social media. Images were coded as objectified if one or more feature of objectification was present (1 = Present, 0 = Absent).

Face obscured/absent. Media images of models wherein their faces have been deliberately obfuscated are believed to denigrate the personhood of the models, and is one of the key ways in which bodies are objectified by mainstream media (Aubrey & Frisen, 2011; Deighton-Smith & Bell, 2017; Fredrickson & Roberts, 1997). Images were coded (0 = Present, 1 = Absent) as to whether the participant's face was visible or not.

Body part main focus. Objectification involves emphasising the separate body parts of individuals, rather than focusing on them as holistic humans (Fredrickson & Roberts, 1997). Thus, images can be considered to contain objectified female representations by focusing on a woman's body parts rather than her face or a more holistic representation of the women (Tiggemann & Zaccardo, 2018). This was coded as 1 = Yes, 0 = No.

Body parts exposed. Four body parts (arms, cleavage, abdomen, legs) were coded according to whether the skin was exposed or not (1 = Present, 0 = Absent). Objectification was believed to be present when three or more body parts were exposed, since revealing 75% of the body would be consistent with Fredrickson and Roberts' (1997) observation that objectified women typically show a high proportion of skin. The coded body parts were chosen on the basis of previous research (e.g., Aubrey & Frisen, 2011; Deighton-Smith & Bell, 2017; Ghaznavi & Taylor, 2015)

Sexually suggestive pose. Previous content analyses have coded sexual objectification in multiple ways, including: alluring gaze; winking; flirting; posing sexually (e.g., arching back); sexual teasing; wearing unbuttoned, ripped or partially open clothing; wearing lingerie; and pouting while tilting the head suggestively to the camera (Coltrane & Messineo, 2000; Ghaznavi & Taylor, 2015; Tiggemann & Zaccardo, 2018). In the present study, images were coded as being sexually suggestive if one or more of these features was present (1 = Present, 0 = Absent).

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Likes. The number of likes achieved on each image was extracted by the coders and recorded as continuous data.

Measures

Participants completed a questionnaire containing measures of demographic information (i.e., age, gender, and ethnicity), Instagram use, and self-objectification.

Instagram usage. Participants completed four questions about their typical Instagram use. To assess daily Instagram use, participants were asked two open-ended questions: how often they check Instagram every day and how long (in minutes) they spend checking Instagram each time. Responses were multiplied together to create an estimate of minutes spent using Instagram on a daily basis. Next, participants were asked to estimate of how often they post images to Instagram. Again, participants were provided with an open-ended response format for this question. Responses were then coded by the researchers as 1 = *Daily*, 2 = *Less than daily but more than weekly*, 3 = *Weekly*, 4 = *Less than weekly but more than monthly*, 5 = *Monthly*, and 6 = *Less than monthly*. Lastly, participants were asked whether their Instagram accounts were set to public or private.

Self-objectification. The Self-objectification Questionnaire (Noll & Fredrickson, 1998) requires participants to rank a selection of 10 body attributes according to how important they are to their self-concept (1 = *Not at all important to me*, 10 = *Very important to me*). Five of the attributes are appearance-based (e.g., sex appeal and physical attractiveness) and five are competence-based (e.g., health and stamina). Scores are calculated by subtracting the sum of the competence attributes from the sum of the appearance attributes (Range = -25 to 25). High scores reflect a greater emphasis on the importance of appearance-based physical attributes over competency-based attributes, indicating high levels of self-objectification. The measure has good construct validity (Noll &

224 Fredrickson, 1998) and is widely used in young female samples (e.g., Gay & Costano, 2010;
225 Tiggemann & Williams, 2012).

226 ***Positive feedback.*** To calculate participants' mean positive audience feedback for (1)
227 all images, (2) objectified self-images and (3) non-objectified self-images, the likes accrued
228 on all images coded as fitting within that category were summed and then divided by the
229 corresponding number of images to create mean positive feedback scores for each participant.

230 **Procedure**

231 Having responded to the study advertisement, participants were sent a link to an
232 online questionnaire, which included measures of self-objectification and Instagram use, via
233 email. Participants were also asked to supply the username of their personal Instagram
234 account and informed that the researchers would access their account with the next five days
235 to retrieve, and subsequently, code their 20 most recent posts. To extract Instagram data, the
236 research assistant searched for the participants' Instagram user name. They then "followed"
237 the participant for the period of data collection and "unfollowed" once retrieval of images
238 was complete. The researchers used screen-capture software to store a duplicate of the image
239 and information about the number of likes it had received. Images were stored on a password
240 protected computer accessible only by the research team. The study adhered to BPS ethical
241 guidelines and received ethics approval from the University Ethics Committee.

242 **Results**

243 **Content Analysis of Instagram Posts**

244 First, the frequency with which young women presented themselves in objectifying
245 ways on social media (RQ₁) was examined. This analysis was conducted on an overarching
246 sample level to calculate the frequency/percentage of image types within the entire sample of

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images (see Table 1). More than half of participants' Instagram posts included a self-image ($n = 1013$; 58.90%), and over a quarter of Instagram posts contained at least one element of objectification ($n = 512$; 29.77%). Adopting a sexually suggestive pose was the most common form of self-objectification ($n = 432$; 25.12%). Other forms of objectification were less common. Very few posts exposed three body parts simultaneously in order to meet the criteria for objectification in this way ($n = 58$; 3.37%). Arms were most frequently exposed body part ($n = 277$; 16.10%), followed by cleavage ($n = 196$; 11.40%), legs ($n = 138$; 8.02%) and abs ($n = 64$; 3.72%). Participants posted few images of the self with their face absent / obscured from view ($n = 71$; 4.13%) or where a body part other than the face was the central focus ($n = 24$; 1.40%). Although significantly more self-images were found in private Instagram profiles as opposed to public profiles, $\chi^2 = 18.98$, $p < .001$, there were no significant differences in the frequency of occurrence of each category of objectifying self-image or the frequency of occurrence of objectifying self-images overall (see Table 1 for frequencies; all $\chi^2 = 0.01-0.39$, all $p > .53$).

Descriptive Statistics

On average, participants reported using Instagram for 62 minutes every day; however, there was substantial variation in this amount ($SD = 48.29$; range = 9-200), suggesting the median (50.00 minutes) may be a more accurate representation (see Table 2 for descriptive statistics). Despite using Instagram daily, very few participants reported posting images to Instagram on a daily basis (3.5%; $n = 3$). Instead, most posted images on a weekly (47.5%; $n = 41$) or less than weekly but not daily (24.5%; $n = 21$) basis. Some posted on a more than weekly but not monthly basis (17.4%; $n = 15$), and very few posted monthly (4.7%; $n = 4$) or less frequently than monthly (1.2%; $n = 1$). This suggests that the sample of Instagram images used in our study represent around 20 weeks of Instagram content for the

majority of women in our sample. The mean positive audience reaction for participants' general Instagram posts was ($M = 26.21$, $SD = 29.49$), however there was substantial variation in this (range = 2.95-178.30), again suggesting the median may be a better representation of this ($Mn = 16.90$). Participants received a significantly more positive audience reaction for objectified self-images ($M = 28.96$, $SD = 34.00$, $Mn = 17.72$) than non-objectified self-images ($M = 25.39$, $SD = 31.08$, $Mn = 16.75$), $z = -3.31$, $p < .001$, $n = 86$.

Daily time spent using Instagram and frequency of posting images were not correlated, $r_s(83) = -.10$, $p = .39$. Furthermore, neither of the self-reported Instagram use measures were correlated with trait self-objectification (daily Instagram use $r_s[84] = .14$, $p = .20$; frequency of posting images $r_s[85] = -.08$, $p = .49$). Positive audience reaction for general Instagram posts was not correlated with self-objectification or overall Instagram use, $r_s(85) = .01$, $p = .93$ and $r_s(84) = -.03$, $p = .81$, respectively. However, it was positively correlated with Instagram posting frequency, $r_s(85) = -.25$, $p < .05$. Thus, individuals who received more positive feedback on their images reported posting images to Instagram more frequently. There were no significant differences between participants with public and private Instagram accounts in terms of self-reported Instagram use (daily use $U = 796.50$, $p = .45$, $n = 84$; frequency of posting images $U = 862.58$, $p = .71$, $n = 85$), self-objectification ($U = 777$, $p = .20$, $n = 86$), and mean positive feedback for all images ($U = 775.50$, $p = .20$, $n = 86$), objectified self-images ($U = 760.50$, $p = .16$, $n = 86$) and non-objectified self-images ($U = 827.50$, $p = .40$, $n = 86$).

Predictors of Posting Objectified Self-Images

Lastly, we sought to assess whether frequency of posting objectified self-images could be predicted by participants' trait level of self-objectification and typically receiving more positive feedback for objectified self-images, compared to non-objectified self-images.

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To do this, frequency of posting objectified self-images was calculated for each participant by summing the number of images that met the criteria for self-objectification ($M = 5.95$, $SD = 3.97$, $Mn = 5.50$). Then, a hierarchical multiple regression analysis was performed, with frequency of posting objectified self-images as the criterion variable. Predictor variables were added in four steps. Trait self-objectification was entered in Step 1 (H_1). Participants' mean positive feedback for non-objectified self-images was added in Step 2 in order to control for the large individual differences in positive feedback typically received by participants, then their mean positive feedback for objectified self-images was added in Step 3 (H_2). The interaction between self-objectification and positive feedback for objectified self-images was entered in Step 4.

Step 1 of the regression analysis was found to be significant, $R^2 = .08$, $F(1, 84) = 6.78$, $p < .05$. Self-objectification significantly predicted the frequency with which young women posted objectified self-images to social media, $\beta = .26$, $p < .05$, $sr = .27$, accounting for 8% of the variance. The inclusion of mean positive feedback for non-objectified self-images in Step 2 did not significantly improve the model, $\Delta R^2 = .01$, $F(1, 83) = 0.58$, $p = .45$, $\beta = .08$, $p = .45$, $sr = .08$. However, the inclusion of mean positive feedback for objectified self-images did improve the model, $\Delta R^2 = .05$, $F(1, 82) = 5.07$, $p < .05$. Typically receiving more positive feedback on objectified self-images, while controlling for mean positive feedback on non-objectified self-images, significantly predicted the frequency with which young women posted objectified self-images, $\beta = .51$, $p < .05$, $sr = .23$, accounting for an additional 5% of the variance. Lastly, the inclusion of the interaction term did not improve the model, $\Delta R^2 = .00$, $F(1, 81) = 0.26$, $p = .61$; interaction $\beta = .12$, $p = .33$, $sr = .05$. Therefore, in the present study, the frequency of posting objectified self-images was found to be associated with trait-levels of self-objectification and typically receiving more likes on this type of self-image relative to other self-images.

Discussion

First, the present study examined the extent to which young women share objectified self-images on social media. Around a third of the young women's Instagram posts featured objectified self-images, with sexually suggestive poses being the most frequent form of self-objectification. Second, the study examined whether the frequency of posting objectified self-images can be predicted by self-objectification, positive audience reaction (as indicated by likes achieved on objectified self-images relative to non-objectified self-images), and the interaction between the two. As predicted, the frequency of posting self-objectifying images was associated with their trait levels of self-objectification (H_1) and whether their self-objectifying images typically received more positive audience feedback in comparison to other self-images (H_2). However, no significant interaction effect was found.

The findings are consistent with previous content analyses that have found a high proportion of social media imagery featuring young sexually objectified women (Deighton-Smith & Bell, 2017; Doring et al., 2016; Ghaznavi & Taylor, 2015; Hall et al., 2012; Kapidzic & Herring, 2015; Tiggemann & Zaccardo, 2016). Sexually-suggestive poses were the most common form of objectified self-presentation. Other forms of self-objectification, including faceless bodies, bodies with a high proportion of the skin exposed, and a focus on a body part other than the face, were less common than has been found in mainstream media (e.g., Aubrey & Frisby, 2011; Fredrickson & Roberts, 1997) or hashtag-labelled publicly available social media content (e.g., Deighton-Smith & Bell, 2017). The high frequency of sexually suggestive images within the sample may reflect the developmental stage of the participants. Though relationship status was not controlled for, as part of their normative sexuality development, many young adult women wish to be seen as sexually attractive to

others (Tolman & McClelland, 2011) and be more likely to engage in sexy displays on social media.

There were individual differences in the extent to which young women presented themselves in objectified ways, and, as expected, trait self-objectification accounted for some of the variance in this. This finding is a significant contribution to the objectification theory research literature: though research has shown that young women primed with self-objectification are more likely to behave in object-like ways in the presence of others (e.g., Saguy et al., 2010), scant research has considered how young women with high levels of trait self-objectification present themselves visually to others. This finding is also consistent with existing research that has similarly linked factors associated with self-objectification (i.e., engagement with sexually objectifying media and endorsement of gender stereotypes) with sexually objectified self-presentations (van Oosten et al., 2017; Vandenbosch et al., 2015).

Receiving more likes on objectified self-images relative to non-objectified self-images also was associated with the frequency of posting objectified self-images. According to SPT, individuals engage in self-presentations to please the audience (Baumeister, 1982). Receiving more positive feedback on objectified self-images relative to non-objectified self-images indicates that such self-presentations will please the audience, thus providing motivation for presenting the self in similar ways in the future. This novel finding is consistent with existing qualitative research suggesting that the desire for receiving more likes is a motivator of posting objectified self-images among young women (Chua & Chang, 2016; Mascheroni et al., 2015) and experimental work demonstrating the social reinforcing properties of positive social media feedback (Sherman et al., 2016). Furthermore, given that women typically received more likes on their objectified self-images than their non-objectified images, and research highlighting the socially reinforcing properties of likes, our

findings may also help shed light on why young women engage in objectified self-presentations, despite the potentially deleterious consequences for themselves and others (e.g., Daniels & Zubriggen, 2016).

In the present study, we have conceptualised self-objectification and audience reaction as predictors of objectifying self-presentations. However, all measures were taken at the same time point, so causality cannot be assumed. Existing research (e.g., Halpern, Valenzuela, & Katz, 2016) has found that personality traits not only predict increases in sharing self-images over time, but also that the frequency of posting self-images also predicted personality traits. Therefore, longitudinal research is needed to disentangle and clarify associations between trait self-objectification, audience reactions, and sharing self-objectifying images over time. Alternatively, future research could focus on identifying the immediate situational factors that contribute to posting objectified self-images on social media, as well as the self-related consequences of posting these, using experience sampling techniques (e.g., app-based diary studies).

Though our findings cannot attest to the consequences of engaging in objectifying self-presentations on social media, previous research has suggested that women presented in sexually objectifying ways on social media are rated more negatively than their non-objectified counterparts (Daniels & Zubriggen, 2016). Past research has also shown that viewing sexually objectified images can cause self-objectification and negative body image among those who view them (Tiggemann & Holland, 2016; Vandenbosch, & Eggermont, 2012). Given the widespread use of sexually objectifying self-images, considerations for social media literacy programmes should be made. Recent research has shown that greater media literacy among can mediate reduced body satisfaction after viewing magazine images of thin-ideal models (McLean, Paxton, & Wertheim, 2016). Further, a recent pilot evaluation

of a social media literacy intervention was found to reduce risk factors for eating disorders among female adolescents (McLean, Wertheim, Masters, & Paxton, 2017). These studies suggest that media literacy programmes may be effective in reducing the impact of engaging with problematic traditional and social media imagery linked to negative body image.

Typically, previous studies have relied on self-report to capture image-sharing practices, which is prone to subjectivity and bias. The present study used a more objective measure created through content analysis to overcome this. However, the content analysis focused on participants' 20 most recent Instagram posts only, and it is unclear how representative this dataset is of their typical image-sharing. Future research may benefit from using a more stratified sample of social media images (i.e., collected at several different time points) to determine representativeness. Furthermore, the present study involved a small and relatively homogenous sample of young Caucasian female students from the same geographical region in the UK. Given cultural variations in self-objectification (Moradi & Huang, 2008), more research is needed to understand the generalisability of the findings. Finally, the variables examined in the present study explained only 13% of the variance in objectified self-image posting frequency. Future research should consider the contribution of other factors, including marital/relationship status, sexuality, and body image.

Conclusion

The present study is the first to examine the extent to which young women present themselves in self-objectifying ways on social media, and the factors associated with frequency of engaging in such self-presentations. Approximately one third of young women's Instagram self-images met criteria for self-objectification, and adopting a sexually suggestive pose was by far the most common form of objectification within the sample. Variation in the frequency with which young women post objectified self-presentations was associated with

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415 their trait levels of self-objectification and receiving more positive feedback on those images.

416 Future research should aim to disentangle causality in these relationships.

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Table 1. Frequency and percentage of each Instagram coding category within the sample, along with inter-rater reliability

	Private		Public		Overall		
	(n = 840)		(n = 880)		(N = 1720)		
	n	%	n	%	n	%	K
Participant present	531	63.21%	465	52.84%	1013	58.90%	.90
Face obscured	35	4.17%	36	4.09%	71	4.13%	.88
Body part other than face main focus	12	1.42%	12	1.36%	24	1.40%	.81
3 or more body parts exposed	26	3.09%	32	3.63%	58	3.37%	n/a
Arms	154	18.33%	123	13.98%	277	16.10%	.82
Cleavage	94	11.19%	102	11.59%	196	11.40%	.82
Abs	37	4.40%	27	3.68%	64	3.72%	.88
Legs	70	8.33%	68	7.72%	138	8.02%	.83
Sexually suggestive pose	213	25.36%	219	24.89%	432	25.12%	.85
Contains one or more element of objectification	251	29.88%	261	29.66%	512	29.77%	n/a
Likes (Mean)	-	-	-	-	-	-	.96

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Table 2. Mean (standard deviation) and median of self-reported Instagram use (daily Instagram use and frequency of image posting), trait self-objectification, and positive audience feedback on all images, objectified self-images, and non-objectified self-images

	Private		Public		Overall	
	<i>M (SD)</i>	<i>Mn</i>	<i>M (SD)</i>	<i>Mn</i>	<i>M (SD)</i>	<i>Mn</i>
Daily Instagram Use (minutes)	70.32 (54.99)	50.00	55.96 (40.72)	46.25	62.80 (48.29)	50.00
Frequency of Image Posting	3.05 (0.97)	3.00	2.93 (0.90)	3.00	2.99 (0.93)	3.00
Self-objectification	-1.67 (8.73)	-2.00	1.11 (10.10)	0.00	-0.24 (9.50)	0.00
Positive audience reaction						
- All images	22.62 (23.70)	15.40	28.69 (34.21)	18.00	26.21 (29.49)	16.90
- Objectified self-images	25.06 (26.56)	15.47	32.68 (39.80)	20.75	28.96 (34.00)	17.72
- Non-objectified self-images	23.78 (26.23)	14.83	26.93 (35.34)	17.00	25.39 (31.08)	16.75

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